

12. NOTES ON THE NESTING OF THE BLACKNAPED  
TERN, *STERNA SUMATRANA MATHEWSI* STRESEMANN,  
IN THE MALDIVE ISLANDS

Although I had met with the Blacknaped Tern in North Malé Atoll (*JBNHS* 55 (2): 211) where it is the most plentiful of the nine species of terns that are known to occur, I had not had the opportunity of studying the breeding of the species until I discovered several small nesting colonies in Addu Atoll, the most southernly atoll of the Maldivian Archipelago, during the month of June 1958.

On 2 June 1958 while passing a channel-marking pillar off the inner reef of Hittadu Island in Addu Atoll, I observed a pair of these terns mating on the top of the pillar. Enquiries showed that they were believed to lay their eggs, during May and June, on an uninhabited islet on the outer reef some 5 miles to the north. So I arranged to visit the place the next day.

Starting early in the afternoon, with very little wind, we rowed and sailed over to Bushy Island or Kanda Hera, an islet on the outer reef some 5 miles north-west of Gan Island, where we were living at the time. As we approached close to the islet which was scarcely more than a large coral bank clothed with scrub, dense in places but cleared and planted with a few coco-nut palms in the centre, the terns began to rise from the beaches and fly out to meet us. Circling the boat with continuous cries, in the manner usual to nesting terns when demonstrating their annoyance and concern at intrusion, they kept up a constant babel although their cries were less harsh and raucous than those of other species of colonial nesting terns that I had studied.

The colony was not a large one; I would estimate it at not more than 30 to 40 pairs. The eggs were not easy to find; they were scattered over the raised beaches, some 4 or 5 feet above the high water mark and 5 to 15 feet from the tide line, but they were not all laid close together or in one or two adjacent areas. On the contrary, one gained the impression that each pair had endeavoured to keep as far away as possible from other nesting pairs.

There were no nests. The eggs were laid either on the bare coral shingle, between small lumps of broken coral, or in shallow scrapes which appeared to have been formed by the birds setting down to brood the eggs, rather than intentionally. The eggs blended extremely well with their background of weathered grey coral shingle and sand, and were difficult to distinguish. 14 clutches were counted; 7 contained single eggs and 7 were of c/2 each. Possibly some of the single eggs represented half clutches, but two that were broken

by boatmen's feet were both incubated. Fourteen eggs were measured: they averaged 39.4 mm.  $\times$  27.44 mm. (38 to 44 mm.  $\times$  26 to 29 mm.).

In all eggs, except one, the ground colour was a light stone-grey, matching well the grey of the weathered coral on which they were laid. In the single exception, the ground colour had a distinct brown tinge. All eggs were typical 'terns' eggs', the markings consisting of spots, speckles, and blotches of sepia to light brown, overlaying smudges and faint blotches of purplish grey or lavender. Some eggs were considerably more heavily marked than others and some were more distinctly spotted than others. In several, the spotting and speckling was well distributed over the whole surface, with one or two hair-lines at the larger end; in others there was a well-defined zone of sepia blotches either midway round the egg or towards the larger end, while in three eggs there were large, dark brown blotches measuring up to 21  $\times$  17 mm. and others of pale bluish grey. Apparently, blotches, when present, may be anywhere on the surface of the egg but usually they are towards the larger end.

An abnormally shaped egg, measuring 44  $\times$  26 mm., was more or less unmarked at the smaller end but had a well-defined zone, round the larger, of underlying purplish grey with large and small spots of dark brown and purplish brown superimposed; elsewhere there were a few spots and faint smudges of sepia.

Leaving Bushy Island, we visited two other tiny coral islets on the outer reef—mere outcrops or flat biscuits, only a few feet above high water, with much broken coral-shingle thrown up on them by storms. Although over the first a few Blacknaped Terns were flying and demonstrated their annoyance at our intrusion, no eggs could be discovered; but on the second, which was rather the smaller, six pairs of c/2 were found after considerable searching. Again they were not all close together in one sector of the islet but were spread apart, with several yards between clutches.

Except that all eggs were in clutches of two, no differences were noted between this and the Bushy Island colony, distant about half a mile to the north. It was estimated that this colony numbered not more than 20 pairs.

A third nesting-colony was discovered on 13th June on a tiny storm-piled bank of broken cora shingle thrown up on the main outer reef on the south-western side of Gan Island (Addu Atoll). A few terns were visible, with the aid of field glasses, circling the islet from time to time so I waded out to investigate. As usual, as I approached, a number of Blacknaped Terns flew out to meet me and register their protests at my coming. At first, I could find nothing to

justify their concern but after a more intensive search and the watching of some of them as they alighted, I was eventually able to find three clutches c/2, c/1, and 4/1. It was evident that the members of this colony were only just commencing to lay and some of them were still engaged in choosing egg-sites.

Again there were no attempts at nests, the eggs in every case being laid on the bare coral sand, in very slight scrapes or, more truly, in smoothed circles of  $1\frac{1}{2}$  to 2 inches in diameter. The eggs themselves were very similar to those of the other two colonies.

The general breeding behaviour of the Blacknaped Tern, when nesting, appears to conform very closely to the normal behaviour pattern of the Sternidae; numbers fly out to meet the intruder on his approach to the breeding territory, circle screaming overhead throughout his stay, and quickly resettle themselves on their eggs or alight on coral knobs on his withdrawal. The voice of this tern is, however, less loud and harsh than in the majority of the family.

c/o R.A.F. GAN,  
c/o AIR MOVEMENTS,  
KATUNAYAKE,  
CEYLON,  
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[The overall breeding range of the species *Sterna sumatrana* Raffles is islands in the Indian Ocean and western Pacific, north to the China Sea, south to New Caledonia. Within Indian limits the typical race (Burma, Malaysia) breeds in the Andaman and Nicobar Islands. The range of the race *mathewsi* (described from the Aldabra Islands north of Madagascar) is given as islands of the western Indian Ocean from the Seychelles, Amirante and Aldabra Islands, east to the Chagos Islands. The race occurring in the Maldives had remained undetermined until specimens were collected recently by Major Phillips (*JBNHS* 55: 211).—Eds.]

### 13. THE PRESENT STATUS OF THE WHITEWINGED WOOD DUCK, *CAIRINA SCUTULATA* (S. MÜLLER)

(With a plate)

At its inaugural session at Mysore in 1952, the Indian Board for Wild Life placed two ducks of north-east India on the special Protected List. These two were the Pinkheaded Duck (*Rhodonessa caryophyllacea*) and the Whitewinged Wood Duck (*Cairina scutulata*).